

PATTERNS OF TOBACCO SMOKING IN HARIPUR

Muhammad Asif Jaleel¹, Rozina Nooreen², Abdul Salam³ and Abida Parveen⁴

¹Department of Biochemistry, ²Department of Physiology, Department of Pathology, Women Medical College, ⁴Family Practice, Abbottabad

ABSTRACT

Background: The use of tobacco in any form by human being has proved to be a health hazard and its harmful effects on human health cannot be ignored. Smoking is the largest single preventable cause of ill health in the world, affecting smokers and non-smokers through pollution of the environment. We decided to know the pattern of tobacco smoking and their harmful effects in the residents of Haripur.

Material & Methods: The study was carried out on 3200 subjects residing in different localities of Haripur. A questionnaire regarding their personal and specific information about smoking was filled individually. They were also asked about the common harmful effects of smoking. The results were compiled and analyzed.

Results: Out of the 3200 study population, 1460 (45.63%) were found to be smokers. Some persons also used huka and cigar. Six hundred and twenty (42.46 %) smokers were smoking just for company while 456 (31.23 %) for anxiety and remaining 384 (26.30 %) only casually. Twenty to forty cigarettes of different brands per day were used. They were consuming money for cigarette smoking in the range of Pakistani Rupees 300-2000 per month.

Among smokers, 855 (58.56 %) complained of nocturnal cough, 270 (18.49 %) during day and 335 (22.95 %) at both the times. Five hundred & eleven smokers (35 %) complained of sputum, while 116 subjects (7.94 %) haemoptysis. One hundred and nine smokers (7.46 %) reported symptoms or diagnosis of ischaemic heart disease. Eighty-eight (6.02 %) smokers smoked during fasting of Holy month of Ramazan. Eight hundred and seventy five smokers (59.93 %) do not hesitate to smoke at public places.

Conclusion: Smoking is quite common in Haripur. Smokers should quit smoking to avoid financial losses and harmful physical effects.

Key words: Pollution, Haripur, Smoking, Cigarette.

INTRODUCTION

Nicotine is present in the cigarette smoke. Nicotine causes the heart to beat faster. Blood vessels constrict, blood pressure rises, pulse rate increases. Free fatty acids pour into the blood. These effects combined with the stress caused by carbon monoxide in cigarette smoke, are thought to cause heart attack. At first, the impact of nicotine sharpens thinking but soon the smoker feels tired and let down, heart rate slows, blood pressure drops, the mind loses its keen edge. The drug has other contradictory effects. Hitting the brain first, it galvanizes nerve connections, then blocks them; evokes the discharge of adrenalin and similar catecholamines, then shuts them down. In small doses, nicotine causes tremors; in large doses, convulsions. Small doses stimulate breathing; large one has the opposite effect. Nicotine excites the vomiting reflex. It has an anti-diuretic effect, but in the intestines, it is initially stimulating, explaining why so many smokers depend on the first smoke of the day for bowel regularity. Later doses, however, slow down the

entire digestive process. Nicotine at first increases the flow of saliva in the mouth and mucus in the bronchial tubes; the effects are reversed with later doses.

The most dangerous coronary risk factor, cigarette smoking is directly responsible for at least 20% of all deaths from heart disease. Smokers in their thirties and forties have a heart attack rate that is five times higher than their non-smoking peers. Smoking lowers HDL levels (the so-called good cholesterol) causes deterioration of elastic properties in the aorta and increases the risk for blood clots. Smoking also increases the activity of the sympathetic nervous system. The more a person smokes the higher the chance of developing coronary heart disease and experiencing a heart attack. According to one report non-smokers who spend as little as half an hour in a smoke filled room suffer a serious drop in blood levels of antioxidants, such as vitamin C, which may be important for heart protection.¹⁻⁷

Mentally ill cigarette smokers, like other smokers, are at high risk of smoking related deaths. Persons with major depression, alcohol disorders, and schizophrenia have high mortality rates from vascular disease and cancer. Smoking also complicates the treatment of some mental disorders by decreasing blood levels of neuroleptics. Thus, smokers may require larger doses to achieve therapeutic effect, and thereby run an increased risk of adverse effects. Some studies have found that smokers experience more tardive dyskinesia than non-smokers.⁸⁻¹⁶

Why do the mentally ill smoke more? Some have suggested that such persons use cigarettes as a means of self-medication for psychiatric symptoms. This theory implicitly assumes that mental illness causes smoking. However, recent findings raise questions about the directions of causality. In a study of childhood and adolescent depression, antecedent smoking was associated with an increased risk of depression, but not vice versa. Similarly current smokers have an elevated risk of first time occurrence of panic attacks relative to non-smokers or former smokers, and smoking may increase the risk of certain anxiety disorders during late adolescence and early adulthood.¹⁷⁻²¹

Smoking causes lung diseases, including pneumonia, flu, bronchitis, cancer, asthma and emphysema.²²⁻³⁴

MATERIAL & METHODS

A total number of 3200 subjects were interviewed for their habit regarding smoking. These subjects belonged to different areas of Haripur and were engaged in different professions. A questionnaire regarding their personal and specific information about smoking and its harmful effects was filled individually. The results were compiled and analyzed.

RESULTS

Out of 3200 subjects interviewed, residing in different localities of Haripur; 1460 persons were found to be indulged in smoking. Among 1460 smokers, some persons also used Huka and cigar with or without cigarette. As a whole 45.63 % people were indulged in smoking.

Out of 1460 smokers, 620 (42.46 %) persons were smoking for just company while 456 (31.23 %) for anxiety and remaining 384 (26.30 %) only casually. Twenty to forty cigarettes of different brands per day were used by different occupation persons.

They were consuming money for cigarette smoking in the range of Pakistani Rupees 300-2000 per month.

Among smokers, 855 (58.56 %) complained of nocturnal cough, 270 (18.49 %) during day and 335 (22.95 %) at both the times.

Five hundred & eleven smokers (35 %) complained of sputum, while 116 subjects (7.94 %) complained of occasional or frequent blood stained sputum.

One hundred and nine smokers (7.46 %) reported of symptoms or diagnosis of ischemic heart disease.

Eighty-eight smokers (6.02 %) smoke during fasting of Holy month of Ramazan. Eight hundred and seventy five smokers (59.93 %) do not hesitate to smoke at public places.

DISCUSSION

Smoking patterns of tobacco smoking have health hazards. In our study about 45.63% of male population was indulged in various patterns of tobacco smoking, which is definitely higher than the society in developed countries where the masses are more aware of the hazards of smoking. To increase awareness of these hazards and to decrease the prevalence of smoking, different steps can be taken on the national level, as proved to be beneficial by other studies. Smoking in all public places should be banned. The government should allocate more time on radio and television and space in the press for anti-smoking messages or provide adequate funds for the optimal coverage of the smoking control programme. A nation wide research study should be undertaken to find out prevalence of smoking and smoking related diseases. Transport authorities, municipal committees and National Highways Authority should prevent displaying sign boards with cigarette advertisements. The Ministry of Sport and Cultural Affairs and Ministry of Information and Broadcasting should stop sponsorship of all events by manufacturing of cigarettes. Schools, colleges and other educational institutions, hospitals, libraries and offices should be declared as smoke free zone. Public Health Education Campaign for smoking control should be intensified. Public Health Education Programmes should be focussed on increasing awareness of health consequences of smoking. Public should be motivated to quit smoking through stop smoking clinics. Chapters on smoking its health hazards should be included in the curricula of high schools. Special seminars and conferences should be held for the politicians and legislators particularly to mobilize their goodwill for a strong anti-smoking campaign in the country.³⁴⁻⁴⁴

CONCLUSION

Smoking is quite common in Haripur. Smokers should quit smoking to avoid financial losses and harmful physical effects.

REFERENCES

1. Department of Health and Human Services. Epidemiology In National Heart, Lung and Blood Institute. Report of the Task Force on Research in Epidemiology and Prevention of Cardiovascular Disease. Rockville, MD: Public Health Services, National Institute of Health, 1994:19-72.
2. Doll R, Gray R, Hafner B, Peto R. Mortality in relation to smoking 22 years observations on female British doctors. *BMJ* 1980;280: 967-74
3. Selizer CC. Framinham study data and "establish wisdom" about cigarette smoking and coronary heart disease. *J Clin Epidemtol* 1988;42: 743-50.
4. Michnovicz JJ, Hershcopf RJ, Haley NJ, Bradlow HL, Fishman J. Cigarette smoking alters hepatic estrogen metabolism in men : implication for atherosclerosis. *Metabolism* 1986;38: 537-41
5. Lightwood J.M, Glantz S.A. Short term economic and health benefits of smoking cessations: myocardial infarction and stroke. *Circulation* 1997;96:1089-96
6. Grodstein F, Stampfer M. The epidemiology of coronary heart disease and estrogen replacement in postmenopausal women. *Prog Cardiovasc Disease*. 1995;38: 199-210.
7. Stampfer MJ, Colditz GA, WC, Manson JE, Rosner B, Speizer FE, et al. Postmenopausal estrogen therapy and cardiovascular disease. Ten years follows-up from the nurses health study [with comments]. *N Engl J Med* 1991; 325: 756-62.
8. Kelly C., Mc Creadie R.G Smoking Habits currents symptoms and pre-morbid characteristics of schizophrenic patients in Nithsdale, Scotland. *Am J Psychiatry*, 1999; 156: 1751-1757.
9. Breslau N. Klein DF. Smoking and panic attacks, an epidemiologic investigation. *Arch Gen Psychiatry* 1999;56:1141-1147
10. Goff DC, Henderson DC, Amico E. Cigarette smoking in Schizophrenia; relationship to psychopathology and medication side effect. *Am J Psychiatry*, 1992; 149: 1189-1194.
11. Addington J, Guebalay N, Campbell W, Hodgins DC, Addington D. Smoking cessation treatment for patients with schizophrenia. *Am J Psychiatry*, 1998, 155: 974-976
12. Glassman AH. Cigarette smoking: implications for psychiatric illness. *Am J Psychiatry* 1993 ;54 : 109-114.
13. Breslau N. Peterson E, Schultz L, Andreski P, Chilcoat H. Are smokers with alcohol disorders less likely to quit? *Am J Public Health*. 1996; 86:985-990.
14. Lohr JB, Flynn K. Smoking and schizophrenia. *Schizophr Res*. 1992;8: 93-102.
15. Yassa R. Lal S, Korpassy A, Ally J. Nicotine exposure and tardive dyskinesia. *Biol Psychiatry* 1987; 22: 67-72.
16. Binder RL, Kazamatsuri H, Nishimura T, McNeil DE. Smoking and tardive dyskinesia. *Biol Psychiatry* 1987; 22: 1280-1282.
17. Chiles JA, Cohen S, Roland M, Wright R. Smoking and schizophrenic psychopathology. *Am J Addict* 1993 ; 2: 315 – 319
18. Menza Ma, Grossman N, Van Horn M, Cody R, Forman N. Smoking and movement disorders in psychiatric patients. *Bio Psychiatry* 1991; 20: 109-115.
19. Carmody TP. Affect regulation, nicotine addiction and smoking cessation. *J Psychoactive Drugs* 1989; 24: 111-122.
20. WU L, Anthony JC. Tobacco smoking and depressed mood in late childhood and early adolescence. *Am J Health* 1999; 89: 1837-1840.
21. Johnson JG, Gohen P, Pine DS, Klein DF, Kasen S, Brook JS. Association between cigarette smoking and Anxiety disorders during adolescence and early adulthood. *JAMA* 2000; 284: 2348-2351
22. Russell MAH, Wilson C, Taylor C, Baker CD. Effect of general practitioner's advice against smoking. *BMJ* 1979; 2: 231-235
23. Janes Df, Timens W, Karan J, Rijcken B, Postma DS. (A) symptomatic bronchial hyper responsiveness and asthma, *Respir Med* 1997; 91: 121-34
24. XU X, Rijken B, Schouten JP, Weiss ST. Airway responsiveness and development and remission of chronic respiratory symptoms in adults. *Lancet* 1997; 350: 1431 – 34.
25. Hopp RJ, Townley RG, Biven RE, Bewtra AK, Nair NM. The presence of airway reactivity before the development of asthma. *Am Rev Respir Dis* 1990; 141: 2-8.
26. Postma DS, Rijcken B. The role of atopy and hyperresponsiveness in the development of COPD, *Eur Respir Rev* 1997; 7: 159-62.
27. Villar MTA, Dow L, Coggon D, Lampe FC, Holgate ST. The influence of increased bronchial responsiveness, atopy, and serum IgE on decline in FEV. A longitudinal study in the elderly. *Am J Respir Crit Care Med* 1995;151: 656– 62.
28. Annesi I, Neukirch F, Orvoen-Frija E, et al. The relevance of hyperresponsiveness but not of atopy to FEV, decline. Preliminary results in a working population. *Bull Eur Physiopathol Respir* 1987; 23: 397–400.
29. Rijcken B, Schouten JP, XU X, Rosner B, Weiss ST. Airway hyperresponsiveness to histamine associated with accelerated decline in FEV. *Am J Respir Crit care Med* 1995 ;151: 1377 – 82.
30. Parker DR, O'Connor GT, Sparrow D, Segal MR, Weiss ST. The relationship of nonspecific airway responsiveness and atopy to the rate of decline of lung function. The Normative Aging study. *Am Rev Respir Dis* 1990; 141: 589- 94.

31. Postma DS, Wempe JB, Renkema TEJ, Van der Mark TW, Koeter GH. Hypereesponsiveness as determinant of the outcome in chronic obstructive pulmonary disease. *Am Rev Respir Dis* 1991; 143: 1458-62.
32. Sparrow D, O'Connor G, Colton T, Barry CI, Weiss ST. The relationship of nonspecific bronchial responsiveness to the occurrence of respiratory symptoms and decreased levels of pulmonary function; the Normative aging Study. *Am Rev Respir Dis*, 1987; 135: 1255-60.
33. Beaty TH, Newill CA, Cohen BH, Tockman MS, Bryant SH, Spurgeon HA. Effects of pulmonary function on mortality. *J Chron Dis* 1985; 38: 703-10.
34. Freund KM, Belanger AJ, D'Agostino RB, Kannel WB. The health risks of smoking. The Framingham study:34 years of follow-up. *Ann Epidemiol* 1993; 3: 417-24.
35. Thorndike A.N, Rigotti N.A, Stafford R.S, Singer D.E, Boston, Mass. National patterns in the treatment of smokers by physicians. *JAMA* 1998; 25: 604 – 608.
36. Orleans CT, George LK, Houpt JL, Brodie KH. Health promotion in primary care: a survey of US family practitioners. *Prev Med* 1985;14: 636-647
37. Peto R. Lopez A. Boreham J. Thu M. Heath C. Mortality from tobacco in developed countries: indirect estimation from national vital statistics. *Lancet* 1992: 339:1268 – 78.
38. Doll R. Peto R. Mortality in relation to smoking, 20 years observations on male British doctors. *BMJ* 1976, ii; 1525–36.
39. Doll R. Peto R. Wheatley K, Grey R, Sutherland I. Mortality in relation to smoking; 40 years observation on male British doctors. *BMJ* 1994: 309: 901-11.
40. Russell MAH, Wilson C, Taylor C, Baker CD. Effect of general practitioner's advice against smoking. *BMJ*.1979; 2: 231- 35.
41. Cummings SR, Stein MJ, Hansen B, Richard RJ, Gerbert B, Coates TJ. Smoking counselling and preventive medicine: a survey of internists in private practice and a health maintenance organization. *Arch Intern Med*. 1989; 149: 345-49
42. Thorndike A.N, Rigotti NA, Stafford R.S, Singer D.E, Boston, Mass. National patterns in the treatment of smokers by physicians. *JAMA* 1998; 25: 604 – 08.
43. Anda RF, Remington PL, Sienko DG, Davis RM. Are physicians advising smokers to quit? The patients perspective. *JAMA* 1987; 257: 1916-19.
44. Frank E, Winkleby MA, Altman DG, Rockhill B, Fortmann SP. Predictors of physicians smoking cessation advice. *JAMA* 1991; 266: 3139-44

Address for Correspondence:

Prof. Muhammad Asif Jaleel
Department of Biochemistry
Women Medical College
Abbottabad, Pakistan